

Appl. No. 10/090,917
Amendment and/or Response
Reply to Office action of 25 March 2004

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REMARKS / DISCUSSION OF ISSUES

Claims 1-27 are pending in the application. Claims 21-27 are newly added.

The applicants thank the Examiner for acknowledging the claim for priority and receipt of certified copies of all the priority document(s).

The Examiner is respectfully requested to state whether the drawings are acceptable.

Claims are amended for non-statutory reasons: to correct one or more informalities, remove figure label number(s), and/or to replace European-style claim phraseology with American-style claim language. The claims are not narrowed in scope and no new matter is added.

New dependent claims are added to at least partially restore the original range of claims that existed before multiple dependencies were removed in the preliminary amendment. No new matter is added.

The Office action rejects claims 5, 6, 9-11, 13-17, 19, and 20 under 35 U.S.C. 112, second paragraph. These claims have been amended to correct the typographical errors. The claims are not narrowed in intended scope, and no new matter is introduced.

The Office action rejects claims 1-3, and 7-8 under 35 U.S.C. 102(e) over Hirai et al. (USP 6,545,958, hereinafter Hirai). The applicants respectfully traverse this rejection.

Claim 1, upon which claims 2, 3, and 7 depend, claims a tilt control device with a tilt detector, a focus controller, and a calibration element that is configured to calibrate an offset of the tilt detector based on the focus control output signal.

Hirai does not teach the calibration of a tilt detector based on the output of a focus controller. The Office action asserts that Hirai teaches calibrating the tilt detector based on a focus control output at column 22, lines 55 through column 23, lines 10. The applicants respectfully disagree with this characterization of Hirai. At the cited text, Hirai teaches using the same optical system for reading/recording and for

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tilt detection, and teaches a technique for canceling the effects of the tilt detection laser on the focus-error signal (Hirai, column 22, lines 63-67). As taught by Hirai, focus measurements are taken when the tilt-detecting laser is on and when the tilt-detecting laser is off, and the difference between these measurements provides a measure of the effects of the tilt-detecting laser. This determined effect is subtracted from the focus-error signal to remove the effects of the tilt-detecting laser from the focus-error signal. As taught by Hirai, and as illustrated in Hirai's FIG. 10, the tilt-detecting signal E has an effect on the focus-error signal L, but the focus-error signal L has no effect on the tilt-detecting signal E.

Because Hirai does not teach or suggest calibrating an offset of a tilt detector based on a focus control output, as specifically claimed by the applicants, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 1-3, and 7-8 under 35 U.S.C. 102(e) over Hirai.

The Office action rejects claims 12 and 18 under 35 U.S.C. 102(b) over Yutaka (JPA 10083549). The applicants respectfully traverse this rejection.

Claims 12 and 18 claim a tilt control device and method, respectively, wherein a tilt controller adjusts a tilt frame based on the output of a focus controller at at least two different radial positions and at two different tilt positions at these radial positions. An example sequence is presented at page 8, lines 4-20.

Yutaka teaches adjusting a tilt frame based on the output of a focus controller at multiple radial positions. Yutaka is silent with regard to adjusting the tilt frame based on the output of the focus controller at different tilt positions.

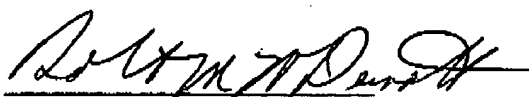
Because Yutaka fails to teach adjusting the tilt frame based on the output of the focus controller at different tilt positions, as specifically claimed in claims 12 and 18, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 12 and 18 under 35 U.S.C. 102(b) over Yutaka.

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In view of the foregoing, the applicants respectfully request that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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